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PATENT

MAY 18 2007 BEN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. 10/622,378

Filed: July 18, 2003

Confirmation No. 4367

For: ADVANCED BI-DIRECTIONAL

PREDICTIVE CODING OF VIDEO

FRAMES

Examiner: Nhon Thanh Diep

Art Unit: 2621

Attorney Reference No. 3382-64472-01

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Attorney or Agent for Applicant(s)

Date Mailed May 18, 20

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Listed on the accompanying form PTO-1449 and enclosed herewith are several English-language and/or non-English-language documents. Applicants respectfully request that these documents be listed as references cited on the issued patent.

Copies of United States patents and United States published patent applications do not have to be provided to the Patent Office (37 C.F.R. 1.98(a)(2)(ii)). Copies of unpublished U.S. applications do not have to be provided, as long as the application is available on PAIR, as this requirement of 37 C.F.R. § 1.98(a)(2)(iii) has been waived by the United States Patent and Trademark Office pursuant to the Official Gazette Notice on October 19, 2004 (1287 OG 163). Applicants will provide copies of such patents or applications upon request.

Applicants filed this Information Disclosure Statement ("IDS") before the mailing date of a first Office action on the merits. As a result, no fee should be required to file this IDS.

However, if the Patent Office determines that a fee is required for Applicants to file this IDS, please charge any such fees, or credit overpayment, to Deposit Account No. 02-4550. A **duplicate** copy of this Information Disclosure Statement is enclosed.

The filing of this IDS shall not be construed to be an admission that the information cited in the statement is, or is considered to be, prior art or otherwise material to patentability as defined in 37 C.F.R. §1.56.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

One World Trade Center, Suite 1600

121 S.W. Salmon Street Portland, Oregon 97204 Telephone: (503) 595-5300

Facsimile: (503) 595-5301

cc: Docketing

Kyle B. Rinehart

Registration No. 47,027

BY APPLICANT

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Attorney Docket Number	3382-64472-01
Application Number	10/622,378
Filing Date	July 18, 2003
First Named Inventor	Mukerjee
Art Unit	2621
Examiner Name	Nhon Thanh Diep

U.S. PATENT DOCUMENTS

Copies of T.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
/ND/		5,260,782	11.9.1993	Hui
/ND/		5,786,860	7.28.1998	Kim et al.
/ND/	<u> </u>	5,822,541	10.13.1998	Nonomura et al.
/ND/		6,175,592	1.16.2001	Kim et al.
/ND/		6,636,565	10.21.2003	Kim
/ND/		6,704,360	3.9.2004	Haskell et al.
/ND/		6,873,657	3.29.2005	Yang et al.
/ND/		6,999,513	2.14.2006	Sohn et al.
/ND/		7,154,952	12.26.2006	Tourapis et al.
/ND/		2001/0040926	11.15.2001	Hannuksela et al.
/ND/		2004/0146109	7.22.2004	Kondo et al.
/ND/		2006/0280253	12.14.2006	Tourapis et al.

FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
/ND/		Europe	EP 0 782 343	7.2.1997	Matsushita Electric Indust.
/ND/		Europe	EP 0 863 673 A1	9.9.1998	General Instrument
/ND/		Europe	EP 0 863 674	9.9.1998	General Instrument

EXAMINER /Nhon Diep/ DATE 07/04/2008 CONSIDERED:	
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^{*} Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

pp. (Dec. 2001).

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FOREIGN PATENT DOCUMENTS					
Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee
/ND/		Europe	EP 0 944 245	9.22.1999	ST Microelectronics
/ND/		Europe	EP 1 006 732	7.6.2000	Mitsubishi
/ND/		Great Britain	GB 2,328,337	2.17.1999	Dae Woo Electronics
/ND/		Japan	JP 11 136683	5.21.1999	Matsushita Electric Indust.
/ND/		Russia	RU 2182727 C2	5.20.2002	Dvorkovich et al.
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS			
/ND/		Chalidabhongse et al., "Fast motion vector estimation using multiresolution spatio-temporal correlations," IEEE Transactions on Circuits and Systems for Video Technology, pp. 477-488 (June 1997).			
/ND/		Joint Video Team (JVT) of ISO/IEC MPEG and ITU-T VCEG, "Study of Final Committee Draft of Joint Video Specification," JVT-F100, Awaji Island, 242 pp. (December 2002).			
/ND/		Kossentini et al., "Predictive RD Optimized Motion Estimation for Very Low Bit-rate Video Coding," IEEE J. on Selected Areas in Communications, vol. 15, no. 9 pp. 1752-1763 (December 1997)			
/ND/		Lainema et al., "Skip Mode Motion Compensation," Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG (ISO/IEC JTC1/SC29/WG11 and ITU-T SG16 Q.6), Document JVT-C027, 8 pp. (May 2002).			
/ND/		Panusopone et al., "Direct Prediction for Predictive (P) Picture in Field Coding mode," Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG, Document JVT-D046, 8 pp. (July 2002).			
/ND/		Reed et al., "Constrained Bit-Rate Control for Very Low Bit-Rate Streaming-Video Applications," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 11, No. 7, pp. 882-889 (July 2001).			
/ND/		Schwarz et al., "Tree-structured macroblock partition," ITU-T SG16/Q.6 VCEG-O17, 6			

-/2008 -
/200

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Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS		
/ND/		Schwarz et al., "Core Experiment Results On Improved Macroblock Prediction Modes," Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG (ISO/IEC JTC1/SC29/WG11 and ITU-T SG16 Q.6), Document JVT-B054, 10 pp. (JanFeb. 2002).		
/ND/		Tourapis et al., "Direct Prediction for Predictive (P) and Bidirectionally Predictive (B) frames in Video Coding," Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG (ISO/IEC JTC1/SC29/WG11 and ITU-T SG16 Q.6), Document JVT-C128, 11 pp. (May 2002).		
/ND/		Tourapis et al., "Motion Vector Prediction in Bidirectionally Predictive (B) frames with regards to Direct Mode," Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG (ISO/IEC JTC1/SC29/WG11 and ITU-T SG16 Q.6), Document JVT-C127, 7 pp. (May 2002).		
/ND/		Tourapis et al., "Timestamp Independent Motion Vector Prediction for P and B frames with Division Elimination," Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG (ISO/IEC JTC1/SC29/WG11 and ITU-T SG16 Q.6), Document JVT-D040, 18 pp. (July 2002).		
/ND/		Tourapis et al., "Performance Comparison of Temporal and Spatial Direct mode," Joint Video Team (JVT) of ISO/IEC MPEG & ITU-T VCEG (ISO/IEC JTC1/SC29/WG11 and ITU-T SG16 Q.6), Document JVT-E026, 7 pp. (October 2002).		
/ND/		Wiegand et al., "Motion-compensating Long-term Memory Prediction," Proc. Int'l Conf. on Image Processing, 4 pp. (October 1997).		
/ND/		Wiegand et al., "Long-term Memory Motion Compensated Prediction," IEEE Transactions on Circuits & Systems for Video Technology, vol. 9, no. 1, pp. 70-84 (February 1999).		
/ND/		Wien, "Variable Block-Size Transforms for Hybrid Video Coding," Dissertation, 182 pp. (February 2004).		

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